

Appl. No. 09/609,913
Amendment Under 37 C.F.R. § 1.116
Reply to Office Action Mailed January 7, 2005

REMARKS

In the Office Action dated January 7, 2005, claims 1-6, 15-19, 40, 41, 45, and 48 were rejected under 35 U.S.C. § 102 over U.S. Patent No. 6,512,756 (Mustajarvi); claims 7, 8, 46, and 47 were rejected under § 103 over Mustajarvi in view of U.S. Patent No. 6,456,627 (Frodigh); claim 9 was rejected under § 103 over Mustajarvi in view of Frodigh and U.S. Patent No. 5,815,495 (Saitoh); claim 10 was rejected under § 103 over Mustajarvi in view of Frodigh, Saitoh, and U.S. Patent No. 6,584,098 (Dutnall); and claims 20 and 21 were rejected under § 103 over Mustajarvi in view of U.S. Patent No. 6,320,873 (Nevo).

Applicant acknowledges the indication that claims 42-44 and 49-51 would be allowable if rewritten in independent form. Claims 42, 50, and 51 have been amended from dependent form to independent form, with the scope of each claim *unchanged*, to place the claims in condition for allowance.

SUMMARY OF TELEPHONIC INTERVIEW

A telephonic interview was conducted between the Examiner and the undersigned on March 2, 2005. In the telephonic interview, claim 2 was discussed in view of Mustajarvi. The general thrust of the principal arguments advanced by the undersigned was that the Gb interface between the BSS and the SGSN (see Fig. 2) of Mustajarvi does not transmit and receive data according to a connectionless, packet-based protocol, as recited in claim 2. The Gb interface between the BSS and SGSN is a frame relay interface, which is a connection-oriented interface.

As a result of the telephonic interview, the Examiner stated that she would take Applicant's arguments under consideration. The Examiner requested that Applicant submit an amendment incorporating arguments distinguishing the claimed invention from Mustajarvi.

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RESPONSE TO REJECTIONS

Amendments made herein are intended to place the claims in condition for allowance. Therefore, entry of the amendments is respectfully requested.

Claims 1, 7, 15-18, and 48 have been cancelled, without prejudice, to render their rejection moot.

With respect to claim 2 (amended from dependent to independent form with its scope unchanged), Mustajarvi does not teach a controller to transmit and receive data through an interface over a network with a *base station system* according to a *connectionless, packet-based protocol*. As depicted in Fig. 2 of Mustajarvi, the interface between the BSS and the SGSN is a Frame Relay interface, which is a connection-oriented interface, not a connectionless interface. The Office Action referred to the discussion in Mustajarvi that the L3MM layer in Fig. 2 of Mustajarvi can be replaced with an IP layer. Note, however, that the L3MM layer is present in the SGSN and in the MS, *but not in the BSS*. Thus, if L3MM is replaced with IP, then communication between the MS and the SGSN can be according to IP. However, because the BSS in Fig. 2 of Mustajarvi does *not* contain an L3MM layer, such BSS *does not* include an IP layer that enables IP communications between the BSS and the SGSN over the Gb interface. According to the protocol stack disclosed in Fig. 2 of Mustajarvi, the only packet-based communications between the BSS and the SGSN include Frame Relay-based communications, which are connection-oriented, not connectionless, communications.

Fig. 2 of Mustajarvi provides an example of a conventional Gb interface used widely in the wireless industry prior to Applicant's invention. It was only after Applicant's invention that the industry has gone to a connectionless, packet-based interface between the BSS and the SGSN.

In view of the foregoing, it is respectfully submitted that claim 2 is not anticipated by Mustajarvi. Claims dependent from claim 2 are allowable for at least the same reasons.

Moreover, with respect to claim 3, Mustajarvi does not disclose a controller that is adapted to transmit and receive data through the interface over the network with the base

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station system according to a packet-switched protocol that is an Internet Protocol. Figure 2 of Mustajarvi illustrates that the Gb interface in the BSS does not include an Internet Protocol layer to enable communication through the Gb interface according to the Internet Protocol.

Claim 19 (amended from dependent form to independent form with its scope *unchanged*) is also allowable over Mustajarvi, which fails to disclose a serving General Packet Radio Service support node that has an interface to one or more networks coupled to base station systems, wherein the interface comprises an Internet Protocol element to manage communication according to a packet-switched protocol over a network between the GPRS support node and at least one of the base station systems. Even though Mustajarvi discloses that the L3MM layer of the SGSN in Fig. 2 of Mustajarvi can be replaced with an IP layer, there is no teaching in Mustajarvi that this IP layer can communicate according to a packet-switched protocol over a network between the SGSN and the BSS. Rather, the element in the SGSN that communicates with the BSS is the Frame Relay element, which is *not* an Internet Protocol element. In fact, the L3MM layer (substituted with an IP layer) in the SGSN of Fig. 2 of Mustajarvi communicates with a corresponding layer in the mobile station, not in the BSS.

For the foregoing reasons, claim 19 is not anticipated by Mustajarvi. Claims dependent from claim 19 are allowable for at least the same reasons.

Claim 46 (amended from dependent form to independent form with its scope *unchanged*) was rejected as being obvious over the asserted combination of Mustajarvi and Frodigh. It is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 46, for at least the reason that even if the references can be combined, the hypothetical combination of Mustajarvi and Frodigh does not teach or suggest *all elements* of claim 46. The Office Action identified the node of claim 46 as made up of the base station controller (BSC) and base transceiver system (BTS) in Mustajarvi. However, the BSC depicted in Mustajarvi communicates over a Gb interface with the SGSN according to the Frame Relay protocol, not a connectionless packet-based protocol. Therefore, it is respectfully submitted that the hypothetical

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combination of Mustajarvi and Frodigh fails to disclose or suggest all elements of claim 46.

Claims dependent from claim 46 are allowable for at least the same reasons.

Allowance of all claims is respectfully requested. The Commissioner is authorized to charge any additional fees, including extension of time fees, and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0027US).

Respectfully submitted,

Date:

Mar 7, 2005



Dan C. Hu, Reg. No. 40,025
TROP, PRUNER & HU, P.C.
8554 Katy Freeway, Suite 100
Houston, TX 77024
713/468-8880 [Ph]
713/468-8883 [Fax]